

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Matey 290 Insecticide**

Other Names: An organophosphorus pesticide, Group 1B Insecticide.
Use: A liquid broad spectrum agricultural insecticide.
Company: Apparent Pty Ltd.
Address: Suite G.08, 762 Toorak Rd, Hawthorn East, Vic 3123.
PO Box 3092, Cotham PO, Kew, Vic 3101.
ACN/ABN: 143 724 136.
Telephone Number: 03 9822 1321
Email: enquiries@apparentag.com.au
Emergency Contact: 0411 227 338

SECTION 2

HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.
Classified as a Dangerous Good according to the ADG Code.**

GHS Classification:

Eye damage/irritation: Hazard Category 2B.
Flammable Liquids: Hazard Category 3.
Acute Toxicity – Oral: Hazard Category 3.
Acute Toxicity – Dermal: Hazard Category 4.
Sensitization – Skin: Hazard Category 1, 1A, 1B.
Hazardous to the Aquatic Environment – Acute Hazard: Hazard Category 1.

Signal Word: DANGER

Hazard Statements:

H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H317 May cause an allergic skin reaction.
H320 Causes eye irritation.
H400 Toxic to aquatic life.

Precautionary statements:

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces: — No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing mist, vapours or spray.
P264 Wash hands, arms and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

SECTION 2 HAZARDS IDENTIFICATION (Continued)**Response (Cont):**

P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370 + P378	In case of fire: Use Alcohol resistant foam for extinction.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see Safety Directions on the product label).
P322	Specific measures (see First Aid Instructions on the product label).
P330	Rinse mouth.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Storage and Disposal:

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with national regulations.

Pictograms:**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

CHEMICAL	CAS NUMBER	PROPORTION
Omethoate	60-51-5	290 g/L
1-Methoxy-2-propanol acetate	108-65-6	30-60%
Other ingredients determined not to be hazardous		Balance

SECTION 4 FIRST AID MEASURES**FIRST AID**

Ingestion:	If swallowed do NOT induce vomiting. Wash mouth with water. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. If swallowed, activated charcoal may be advised. Give atropine if instructed.
Eye contact:	Immediately hold eyes open and flood gently with clean water until chemical is removed. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.
Skin contact:	Immediately wash skin with soap and water to remove chemical. Remove contaminated clothing. If skin is irritated, seek medical advice. Launder contaminated clothing before re-use.
Inhalation:	Remove to fresh air and observe until recovered. If effects persist, seek medical advice. In severe case, symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Advice to Doctor: Omethoate is an anti-cholinesterase compound. *Treatment:* Basic aid, decontamination, symptomatic treatment and if necessary administration of antidote. *Antidote:* Atropine sulphate, possibly in conjunction with Toxogonin or obidoxime (PAM). Monitor red blood cell and plasma cholinesterase levels, Administer oxygen if necessary. Watch for pulmonary oedema and delayed neurological symptoms. *Contraindications:* Adrenergic derivatives.

SECTION 5**FIRE FIGHTING MEASURES**

Specific Hazard: Flammable liquid. Flash point 42-45°C. Flammable liquid. Eruption of containers is likely if confined at high temperatures. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure.

Extinguishing media: Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used. If not available, use dry chemical, carbon dioxide, waterfog or fine water spray but ensure all runoff is contained. Contain all runoff.

Hazards from combustion products: There is a risk of an explosion from this product if commercial quantities are involved in a fire. If involved in a fire, it will emit toxic fumes of cyanides, hydrogen chloride and possibly carbon oxides. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6**ACCIDENTIAL RELEASE MEASURES**

Emergency procedures / Material and methods for containment and cleanup procedures: Extinguish all sources of ignition. In the case of spillage, stop leak if safe to do so, and contain spill. Wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield and impervious footwear. In the case of spillage, contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite and dispose of waste in accordance with the requirements of Local or State Waste Management Authorities. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons.

SECTION 7**HANDLING AND STORAGE**

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Keep out of reach of children. Product and spray are poisonous if absorbed by skin contact, inhaled or swallowed. Will irritate the eyes. Repeated exposure may cause allergic disorders. Repeated minor exposure may have a cumulative poisoning effect. Avoid contact with eyes and skin. **DO NOT** inhale spray mist. When preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield and impervious footwear. If clothing becomes contaminated with product remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, face shield and contaminated clothing.

Conditions for Safe Storage: Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Protect from direct sunlight and temperatures above 40°C. If storing for periods of more than 2 - 3 months avoid temperatures above 30°C. Classified as a Dangerous Good – Toxic, flammable liquid.

SECTION 8**EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines:**

No exposure guidelines have been established for this product by Safe Work Australia, however the following guideline is for the solvent in this product.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m ³)
1-Methoxy-2-propanol acetate	274 mg/m ³ (50 ppm)	548 mg/m ³ (100 ppm)

TWA = Time-weight Average STEL = Short term Exposure Limit

Biological Limit Values:

This product is an organophosphate pesticide and health monitoring maybe required. See the Safe Work Australia guidance notes titled "Health monitoring for Exposure to Hazardous Chemicals" and "Organophosphate Pesticides".

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)**Engineering controls:**

Use in ventilated areas adequate to keep exposure below the TWA. Keep containers closed when not in use.

Personal Protective Equipment (PPE):

General: When preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield and impervious footwear. If clothing becomes contaminated with product remove clothing immediately. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves, face shield and contaminated clothing.

Hygiene Measures: Product and spray are poisonous if absorbed by skin contact, inhaled or swallowed. Will irritate the eyes. Repeated exposure may cause allergic disorders. Repeated minor exposure may have a cumulative poisoning effect. Avoid contact with eyes and skin. **DO NOT** inhale spray mist. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colourless liquid.
Odour:	Aromatic with characteristic organophosphorus odour.
Boiling point:	Expected to be 146°C.
Freezing point:	No data available.
Specific Gravity:	Approximately 1.0.
Solubility in Water:	soluble in water.
pH:	No data available.
Flammability:	Flammable liquid.
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	> 23°C and < 61°C.
Poisons Schedule:	This product is Schedule 6 (S6) poison.
Formulation Type:	Soluble concentrate (LC).

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Store away from all sources of ignition. Any electrical equipment in the area of this product should be flame proofed.

Incompatible materials: Strong oxidising agents, strong acids and strong bases.

Hazardous decomposition products: When involved in a fire will emit toxic fumes of hydrogen cyanide, carbon monoxide, phosphorus pentoxide, sulfur dioxide and nitrogen oxides may be formed. Burnt product will generally produce foul odours.

Hazardous reactions: No particular reactions to avoid. Hazardous polymerisation is not possible.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure to omethoate may be headache, dizziness, in-coordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhoea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions.

SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**Potential Health Effects:****ACUTE EFFECTS**

Swallowed: Poisonous if swallowed. Acute oral LD₅₀ = 100 mg/kg (similar formulation).

Eye: This product may cause eye irritation. If exposure is brief, symptoms should disappear once exposure has ceased and product washed from eyes.

Skin: Poisonous in contact with skin. Acute Dermal LD₅₀ = 1000 mg/kg (similar product). Omethoate is a skin sensitiser (guinea pig). Prolonged skin contact with the concentrate can cause defatting of the skin and may result in dermatitis. Repeated minor exposure may have a cumulative poisoning effect.

Inhaled: Probably an inhalation irritant. Breathing vapour can cause headaches, dizziness and nausea. Avoid inhalation of vapours.

Long Term Exposure:

Chronic toxicity: Repeated or prolonged exposure to organophosphates may result in the same effects as acute exposure including the delayed symptoms. The main health effects from repeated exposure would be toxic symptoms of cholinesterase inhibition as described above. Animal studies with omethoate have shown no evidence of oncogenic effect, no evidence of carcinogenic effects and no teratogenic potential.

The long term effects in animals noted for the solvent, 1-methoxy-2-propyl acetate, were headaches, dizziness and possible nausea. The solvent was not mutagenic in the Ames test, and did not cause teratological or other developmental effects.

SECTION 12**ECOLOGICAL INFORMATION**

Environmental Toxicology: Omethoate is moderately to toxic to birds. In Japanese quail (female) LD₅₀ = 79 mg/kg. Omethoate is moderately toxic to fish, with reported LC₅₀ (96 hr) = 9.1 mg/L in rainbow trout, and 30 mg/L in Golden Orfe. It is more toxic to aquatic invertebrate species. Daphnids (*Daphnia magna*) 48 hour EC₅₀ = 0.022 mg/L. Algae (*Scenedesmus subspicatus*) 72 hour EC₅₀ = 167 mg/L. Omethoate is highly toxic to honeybees.

Environmental Fate: Omethoate has low persistence in the soil environment. Soil half-lives of a few days. This product is very toxic to aquatic organisms. This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

SECTION 13**DISPOSAL CONSIDERATIONS**

Spills and Disposal: Persons involved in cleanup require adequate skin protection - see Section 8. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste with the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons. Keep material out of streams and sewers.

Disposal of empty containers: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SECTION 14**TRANSPORT INFORMATION**

Transport: This product is classified as a Dangerous Good. UN 3017, Proper Shipping Name ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point not less than 23°C. (Contains Omethoate, 1-Methoxy-2-propanol acetate). Packaging Group III. Hazchem ●3W. Hazard Identification Number (HIN) 663. Australian Standards Initial Emergency Response Guide No. 17. Also considered as a Marine pollutant.

SECTION 15**REGULATORY INFORMATION**

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a Schedule 6 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 70131.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. Toxic: T, Xn: Harmful, Xi: Irritant.

This product is classified as a Dangerous Good.

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16**OTHER INFORMATION**

Issue Date: 31 March 2016. Valid for 5 years till 31 March 2021. (First issue).

Key to abbreviations and acronyms used in this SDS:

ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).

Carcinogen: An agent which is responsible for the formation of a cancer.

Combustible Liquid: Liquids that ignite with a flash point greater than 60°C.

Flammable Liquid: Liquids that ignite with a flash point less than 60°C.

Genotoxic: Capable of causing damage to genetic material, such as DNA.

Mutagenic: Capable of inducing a genetic mutation in an organism.

LD₅₀: Median Lethal Dose. A statistically derived single dose of a substance that can be expected to cause death in 50% of dosed animals.

PPE: Personal protective equipment.

Teratogen: An agent capable of causing abnormalities in a developing foetus.

TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". Safe Work Australia website. (2016).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End SDS